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GOVERNMENT OF INDIA

MINISTRY OF COMMERCE

REPORT OF THE INDIAN TARIFF BOARD

ON

FAIR RETENTION PRICES OF STEEL PRODUCED BY THE TATA IRON AND STEEL COMPANY AND THE STEEL CORPORATION OF BENGAL

BOMBAY
1949

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REPORT ON FAIR RETENTION PRICES OF STEEL.

Control over steel prices.

1. The Government of India arrived at an arrangement in 1939 with the Tata Iron and Steel Company, who were the main producers of steel, in regard to the rates at which steel was to be supplied to Government for war requirements. This control continued, in one form or another, throughout the war period and during the post-war years, and is also in force now. There were three stages of this control. In the first stage, which extended from 1st October, 1939, to 30th June, 1944, control existed only over prices for supplies meant for war requirements. There was no statutory control over commercial prices and the main producers were free to alter those prices as they chose. In the second stage, which extended from 1st July, 1944, to 31st March, 1946, commercial prices were also brought under statutory control, but the retention prices fixed for the main producers were different for war supplies and for commercial requirements. In the third stage, which commenced from 1st April, 1946, retention prices for steel required for war purposes were abolished, and only one retention price, which is for commercial requirements, has been in force since then. These retention prices are fixed ex-works and are payable to the main producers. Selling prices of steel for commercial requirements are, however, different from retention prices, and these are quoted ex-port. A uniform port price was adopted by the main producers with effect from 9th January, 1943. We describe below briefly the procedure which has been followed in regard to fixation of war contract retention prices, commercial retention prices and selling prices during the three periods mentioned above.

(*a*) *War contract retention prices.*—At the outbreak of the war, when Government negotiated with the Tata Company for suitable prices for steel supplied for war requirements, the Company quoted the prices prevailing in September, 1939. Government agreed to pay these prices with effect from 1st October, 1939, for a period of six months ending March, 1940. These prices were on a f.o.r. works basis. It was also agreed between Government and the Tata Company that, on the expiry of that period, prices for steel supplied for war purposes should be determined afresh by negotiations for every succeeding six-monthly period on the basis of the 1st October, 1939, prices, which were to be increased or decreased according to a rise or fall in the works costs of the Tata Company. Special prices were also allowed for steel in urgent demand which necessitated a special rolling programme. The Steel Corporation of Bengal, which came into production shortly afterwards, agreed to accept the same prices as were being paid to the Tata Company. For the first 6 six-monthly periods, the prices remained unchanged. The first revision was effected on 1st October, 1942, and an increase of Rs. 10 per ton on all saleable steel was allowed. In the 8th price period, *i.e.*, the period beginning from 1st April, 1943, another increase of Rs. 4 per ton was allowed. A further increase of Rs. 6-8-0 per ton was granted in the next price period beginning from 1st October, 1943. In the 10th period, which commenced from 1st April, 1944, a further increase of Rs. 10 per ton was also allowed. The total increase upto 1944 since the inception of steel control thus amounted to Rs. 30-8-0 per ton.

(*b*) *Commercial retention prices.*—Statutory control over prices of steel for commercial purposes was introduced from 1st July, 1944. In fixing these prices, Government endeavoured to get the producers to agree to the same prices for steel sold for commercial purposes as for war supplies. This proposal however, was not acceptable to the main producers. Eventually, commercial prices under control were based on the commercial prices prevalent on 3rd October, 1939, plus the actual increase in costs over those of the base period beginning from 1st October, 1939. The commercial prices for the base period were higher than the war-contract prices by Rs. 2 to Rs. 15. The retention prices were fixed on a f.o.r. works basis and not on a f.o.r. port basis as had been the commercial practice before. This basis for fixing prices remained unaltered up to 1st April, 1946. Until then, two retention prices obtained, one for war supplies and the other for commercial requirements. But from 1st April, 1946, only commercial prices were fixed. When the Excess Profits Tax was abolished in 1946, Government suggested a reduction in the price of steel. The two steel companies agreed to a reduction in price by Rs. 12-8-0 per ton. This reduction was made on the ground that the burden of taxation would be reduced to that extent. These prices remained in force until 31st March, 1947.

(*c*) *Selling prices.*—Statutory selling prices have been fixed on the basis of the retention prices *plus* a surcharge of Rs. 50 per ton. The surcharge has been levied in order to subsidise imported steel whose prices are much higher than those of Indian steel. In order to adjust the selling price and subsidise the imported steel, an Equalization Fund was set up, to which all receipts have been credited, and from which all payments to the main producers and re-rollers have to be made and the difference between the costs of imports and their selling prices has to be met. This Fund, which amounted to about Rs. 2,50,00,000 on 30th June, 1948, is still in operation.

Demand for price inquiry.

2. The demand for a full-fledged inquiry by the Tariff Board into the organisation, efficiency and equipment of the steel industry for determining fair prices was made before the interim Tariff Board when it considered the question of continuance of protection to the industry in January, 1947. It was then pointed out that such an inquiry was necessary in order to safeguard the consumers' interests. It was contended that, although steel was produced more cheaply in India than in many other countries, the full benefit of cheap production was not passed on to the consumer. It was, therefore, urged that the Tariff Board should go into the question of internal costs as well as the organisation of the industry. The Tariff Board at that time felt that such an inquiry would raise many fundamental and complex issues and that it was outside the scope of the reference made to it. However, the Board drew Governments' attention to the views on the subject expressed at the inquiry for such action as Government might deem fit to take in the matter. The Iron and Steel (Major) Panel (1946), set up by the late Planning and Development Department of the Government of India, also recommended that some investigation should be undertaken either by the Tariff Board or by some other independent body, in order to determine the fair selling prices of iron and steel. The Panel particularly stressed the point that the internal prices of iron and steel should no

longer be related to foreign prices but should be based on the local costs of production including a liberal allowance for depreciation and return on investment which should not only maintain the industry in a healthy condition but also attract adequate fresh capital which its expansion would require. Since the Panel and the interim Tariff Board considered this matter, conditions have changed. And a price inquiry has been rendered necessary owing to the producers' claim for an enhancement in the controlled price of steel.

Industry's demand for an increase in price and reference to the Board.

3. (*a*) In January, 1947, the Tata Company informed Government that a substantial reduction in prices of steel was contemplated by the Company with effect from 1st April, 1947. In March, however, before the negotiations commenced, the budget proposals for the year led the Company to reverse its previous proposal regarding price reduction. Instead, the Company asked for an increase of Rs. 30 per ton on the basis of increased costs. The Steel Corporation also put forward a claim for revision of prices, although no specific figure was mentioned. Government referred the matter to the Commodities Prices Board, which was asked to report on the following points :—

(*i*) what should be the fair retention price for billets, and

(*ii*) what should be the adjustment in the existing base retention prices for all other categories to give a fair return to the two companies ?

The Commodities Prices Board was also asked to advise on the relation which the retention prices for billets should bear to the bar retention prices.

(*b*) The Commodities Prices Board, after a summary examination of the case presented by the Tata Company, came to the conclusion that there was no justification for an increase in steel prices. The case of the Steel Corporation could not be examined as the company did not submit its representation to the Board in time, nor could it send its representative to attend the meeting which the Board had arranged.

(*c*) Before Government could come to a decision on the recommendations of the Commodities Prices Board, both the steel companies represented that the matter should be reconsidered and that the recommendation of the Commodities Prices Board should not be accepted. In this connection, they brought to the notice of Government certain new factors, which had arisen since the Board had made its report. In particular, the following points were urged by the companies :—

(*i*) that, owing to labour unrest, the output of steel in 1947-48 would be much lower than that taken into account by the Commodities Prices Board. ;

(*ii*) that the reduced output would increase their works cost ;

(*iii*) that there would be a reduction in gross profits resulting in a substantial decrease in the bonus payable to labour (*iv*) that the result of (*iii*), above, would be serious labour strikes ; and

(*v*) that there had been an increase in railway freight both on raw materials and finished products.

Government considered these representations and decided that the whole matter should be examined afresh by the Tariff Board. Pending such examination, Government agreed to restore from 1st January, 1948, the cut of Rs. 12-8-0 per ton accepted by the Companies in April, 1947 on account of the removal of the Excess Profits Tax, and also to compensate them for the actual increase in railway freight charges. The cut of Rs. 12-8-0 per ton was restored because of the contention of the Tata Company that the incidence of taxation had not been reduced since the Excess Profits Tax had been substituted by the Business Profits Tax and since there had been an increase in the Corporation Tax. Further, Government also sanctioned an increase of Rs. 3 per ton in the retention prices of the main producers from 1st January, 1948, on account of increase, in railway freight charges on raw materials, and also provisionally increased the allowance for freight disadvantage from Rs. 7 to Rs. 15 per ton.

Terms of reference and scope of inquiry.

4. (*a*) The case for a revision of the retention prices of steel for the two main producers was referred to the Board in the Government of India, Ministry of Commerce, Resolution No. 3-T (1)/48, dated 7th February, 1948. The text of the Resolution will be found in Appendix I. In paragraph 4 of the Resolution, the Board has been asked to examine afresh the whole question of steel prices. As mentioned already, in fixing the retention prices, Government had adopted the practice of taking commercial prices prevalent in October, 1939, as the base and allowing an increase or decrease according to changes in works cost every six months. The Board, in its letter dated 20th February, 1948, sought clarification from Government whether it was their intention that the Board should investigate in detail the cost of each product, or whether they desired that the procedure hitherto followed by Government, *viz.*, to find out the increase or decrease in the over-all cost of all saleable steel, should be adopted. The Board was informed that Government wanted a detailed investigation into the costs of different products manufactured by the two main producers so as to determine their fair retention prices ex-works. This clarification considerably enlarged the scope of the inquiry.

(*b*) When the Board had completed the examination of the main producers, the Board was informed by Government on 15th October, 1948, that, while determining fair retention prices for billets and other categories of steel, the Board should investigate the works cost of hot metal (iron for steel making), and also determine the fair ex-works price of pig iron (basic and foundry grades). The Board had already ascertained the works cost of hot metal produced by the Tata Company ; but, as the Steel Corporation does not produce its own hot metal and obtains it on a contract basis from the Indian Iron and Steel Company, the Board had not examined the works cost of hot metal for the Indian Iron and Steel Company. This necessitated a fresh inquiry, and the Technical Adviser and the Cost Accounts Officer attached to the Board had to be deputed to the works of the Indian Iron and Steel Company. In the meantime, the Board was also asked to investigate the cost of production of steel at the Mysore

Iron and Steel Works, Bhadravati. The Board proposes to submit its report in three parts, *viz.*,

(*i*) Retention prices of steel produced by the Tata Iron and Steel Company and the Steel Corporation of Bengal ;

(*ii*) Cost of production of hot metal and fair selling prices of pig iron (basic and foundry grades) ;

(*iii*) Retention prices for Mysore Iron and Steel Works.

Method of enquiry.

5. (*a*) When the Board was advised by Government that a detailed and thorough cost investigation was necessary, the Board deputed its Technical Adviser and Cost Accounts Officer to the two steel companies in order to examine their cost data and statistical records with a view to enabling the Board to determine the lines of investigation. Subsequently, the Board issued a questionnaire (*vide* Appendix II) to the two companies on 30th April, 1948, and requested them to submit their replies not later than 7th June, 1948. Both the companies, however, asked for an extension of time. In the meanwhile, the Board's Technical Adviser and Cost Accounts Officer visited the works of the two companies and started investigation into the costs of production. The President and Members of the Board visited the Tata Company's works at Jamshedpur from 20th to 22nd July and the works of the Steel Corporation at Asansol on 23rd and 24th July. They also visited the subsidiary concerns at Jamshedpur and Kulti. The Board visited also the works of the Indian Iron and Steel Company at Hirapur. After the cost investigations had been completed, the representatives of both the companies were invited to meet the Board for a discussion of the various issues connected with this inquiry. Representatives of the Steel Corporation were examined on 14th and 15th September, 1948, and representatives of the Tata Company were examined on 16th and 17th September, 1948. The names of the representatives of both the companies are given in Appendix III. Mr. C. R. Natesan, representing the Ministry of Industry and Supply, and Mr. M. K. Powvala, Iron and Steel Controller, were examined by the Board on 21st September. And Mr. P. R. Balakrishnan of the Mysore Iron and Steel Works, Bhadravati, was examined on 27th September, 1948.

(*b*) The works cost of each company as estimated by the officers of the Board was discussed with the representatives of the company concerned.

Method of costing.

6. (*a*) The Board's Technical Adviser and Cost Accounts Officer examined the cost data and the statistical records of the two steel companies for the three years, 1945, 1946 and 1947. They generally accepted the figures as given by the companies and, wherever necessary, explanations were asked for and readily obtained. In this connection, we would like to mention that, unlike several other industries, the two steel companies maintain proper cost data and statistical records. Analysis of the cost data for the three years mentioned above, enabled us to have a general picture of the cost structure of the two companies. In estimating the works cost, we have adopted as the basis the actual works cost for the first three months of the financial year of each company, *viz.*, April/June, 1948, for the Tata Company and January/March, 1948, for the Steel Corporation. Estimates of works costs for the above mentioned periods were adjusted to the current level of costs as incurred by the two companies ; and the costs of raw materials and

stores as well as freight rates and labour charges have been adjusted to the costs obtaining in November, 1948. The Board had also intended to reconcile the cost of production for at least one year with the financial accounts of each company. Such a reconciliation was made in respect of the Steel Corporation for the year 1947. As regards the Tata Company, however, the management stated that it was not their practice to reconcile costs with financial accounts and that, if such a reconciliation was required, it would take some eight or nine months to prepare the statements and submit the figures. The Board, therefore, agreed to have a broad reconciliation of profits arrived at on the basis of accounts maintained at the Company's works at Jamshedpur with the Company's published profits. We suggest, however, that in future this Company should try to reconcile their costs with financial accounts to enable a proper cost investigation to be carried out.

(*b*) Before dealing with works cost, we would like to mention a few points relating to the costing method adopted by the two companies.

(*i*) *Credit for scrap.*—The Tata Company does not give full credit for realizations from the sale of scrap in its cost sheets. It allows part of it in the costs, while part of it is included in the profit and loss account. We do not consider this to be a satisfactory practice. In adjusting costs, we have, therefore, adopted the rates as given in the Iron and Steel Control Scrap Price Schedule No. 2, Parts I and II, after making the necessary deductions in respect of freight and surcharge payable to the Steel Controller's pool. We have allowed freight at the rate of Rs. 15 per ton as claimed by the Company. We must point out, however, that this figure seems to be on the high side as the actual freight incurred by the Company during the period April/June, 1948, was only Rs. 6·56 per ton on despatches. Although there has been a subsequent increase in the freight rate, it cannot amount to Rs. 15 per ton ; but, as it was not possible to estimate the actual increase on the basis of the data provided, we have accepted the Company's figure.

(*ii*) *Defectives and cuttings.*—The Tata Company contended that defectives and cuttings should be separated from production of good materials for purposes of costing. We could not agree to this procedure since the cost of production was the same for both good materials and defectives, which pass through the same process and undergo the same treatment. In estimating the works costs we have, therefore, included defectives with good materials ; but in allocating overheads and profits and in fixing prices, we have differentiated between the two.

(*iii*) *General works expenses.*—The practice of the Steel Corporation is to add the general works expenses to the cost of ingots. In determining the cost of a product, we have, however, distributed the total general works expenses over all the main units of production on the basis of their respective operating costs.

(*iv*) *Excise duty.*—Excise duty is included in the costs of ingots in the case of both the companies, as this duty is payable on ingots and not on finished steel.

Estimate of production.

7. In arriving at the works cost, we have first to determine the production of the two companies on which the estimates of costs must be based. We now proceed to consider the estimates of production of the two companies.

(*a*) *The Tata Iron and Steel Company.*—The average production per year of all saleable steel at the Tata Company's works during the ten years 1937-38 to 1947-48 was 7,63,400 tons. The highest production achieved was in 1941-42 when it was 8,39,000 tons. During the last three years, 1945-46, 1946-47 and 1947-48, the highest production was reached in 1946-47 when it was 7,46,000 tons. Production in 1947-48 was 6,64,000 tons and for 1948-49 the Company estimates a production of 6,50,000 tons. After discussing the question fully with the representatives of the Company and examining such data as were made available to us, we have estimated the costs on the basis of a production of 6,81,000 tons of saleable steel. This figure, which is based on the actual production during the costed period, *viz.*, April/June, 1948, is 9·53% less than the production figure for 1945-46, 10·55% less than the 1946-47 figure, but 2·51% higher than the production figure for 1947-48.

(*b*) *The Steel Corporation of Bengal.*—The average production per year of saleable steel at the works of the Steel Corporation during the three calendar years, 1945, 1946 and 1947, was 2,00,077 tons. We have based the estimates of costs for the Steel Corporation on a production of 2,23,170 tons. This figure has been arrived at on the basis of the actual production in the costed period, *viz.*, January/March, 1948. It is 10·4% higher than the 1945 production, 48·4% higher than the production in 1946, and 10·35% higher than the production in 1947. In this connection, it may be pointed out that 1946 was a year of exceptionally low production for the Steel Corporation because of the prolonged strike and the damage to furnaces and other units owing to complete cessation of operations.

(*c*) The following statement shows the production of steel in 1945 with our estimate of production, department by department, as also a comparison of our estimate in terms of percentage of the 1945 production :—

STATEMENT I

Units. (1)	Production in 1945. (2)	Estimate of annual production. (3)	Column 3 as percentage of column 2. (4)
	Lakhs of tons.	Lakhs of tons.	
A. *The Tata Iron and Steel Company*—			
1. Coke ovens	9·007	9·000	99·92
2. Blast Furnaces—			
(*a*) Pig iron	10·060	9·530	94·73
(*b*) Ferro-manganese	·214	·160	74·77
3. Steel Melting Shops No. 1—			
(*a*) Open hearth furnace	3·403	2·880	84·63
(*b*) Electric furnace	·163	·108	66·26

(1)	(2)	(3)	(4)
	Lakhs of tons.	Lakhs of tons.	
4. Steel Melting Shop No. 2	6·000	5·700	95·00
5. Steel Melting Shop No. 3	·543	·500	92·08
6. Blooming Mill	8·327	7·719	92·70
7. Sheet Bar & Billet Mill	5·174	4·671	90·28
8. Rail mill	1·705	1·758	103·11
9. Bar Mill	·299	·236	78·93
10. Merchant Mill	1·511	1·276	84·45
11. Plate Mill	·557	·551	98·92
12. Sheet Mills—			
(*a*) Black Sheets	1·533	1·214	79·19
(*b*) Galvanized Sheets	·880	·485	55·11
13. Pressed Sleepers	·278	·282	101·44
14. Wheel, Tyre & Axle Plant—			
(*a*) Wheels and Tyres	·160	·138	86·25
(*b*) Axles	·029	·043	148·28
B.—The Steel Corporation of Bengal—			
1. Melting Shop	2·534	2·750	108·52
2. Blooming Mill	2·354	2·604	110·62
3. 34″ Mill	1·590	1·574	98·99
4. 18″ Mill	·600	·836	139·33
5. Sheet Mills—			
(*a*) Black Sheets	·862	·780	90·46
(*b*) Galvanized Sheets	·329	·500	152·18

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(*d*) (*i*) It will be seen from the above statement that, in the case of the Tata Company, the estimated production of pig iron is 94·73% of the actual production in 1945, while the production of ingots in the three melting shops taken together is about 91% of the production in 1945. It will also be seen that the percentage of fall in production of ingots is the highest in Shop No. 1 where, in the open hearth furnace, it is 84·63% of the 1945 production. The fall in production in the blooming mill nearly is the same as that in the production of ingots. So far as the other units are concerned, production is regulated according to the planning of the Iron and Steel Controller. The estimate of production in these units is based on the figures of the costed period. Production in the different units may vary from period to period according to changes in planning, but the production of all saleable steel will be more or less in line with the production of ingots.

(*ii*) Several reasons were given by the Tata Company for a fall in production, such as coal shortage and deterioration in its quality, shortage of essential raw materials, spares and general stores and refractories, transport difficulties, deterioration in labour conditons, enforcement of four " offs " in a month under the new Factory Rules, intensification of manufacturing of special products, increased demand for tested steel and demand for products of short lengths and in less than wagonloads.

(*iii*) Although our inquiry is confined to the determination of fair retention prices of steel and is not concerned with the reorganisation of the industry, we discussed the causes of lower production with the representatives of the Company, since increased production has a close bearing on the question of prices. We understood that production was not affected by shortage of coal during the months preceding our inquiry and that there was also an improvement in the quality of the coal. The transport position has also improved during recent months, and it is expected that this improvement will continue. The Company does, however, experience continued difficulties in regard to fluorspar which was previously imported from South Africa. As regards the manufacture of special quality products, the Company has gone in for various lines in order to diversify production. As regards the question of tested steel, consumers are likely to demand more of tested steel with the development of industries. At the present time, British Standard Specifications are applied in respect of tested steel. We consider it desirable that this country should evolve its own standards of tested steel with the assistance of the Indian Standards Institution. The steel industry has made certain representations to the Ministry of Industry and Supply in regard to specifications and ordering of tested steel, and we trust that these proposals will receive favourable consideration. The main difficulties which hamper production, however, are (*a*) unsatisfactory industrial relations and (*b*) the worn-out condition of the plant. As regards labour problems, apart from its schemes of profit-sharing bonus, production bonus, and other amenities to labour, the Tata Company has been devoting considerable attention to a scientific study of the problem of industrial relations. The question of industrial relations, however, is much wider in its scope and implications because of the changed political conditions and the various movements for labour organisation in the country. While it is undoubtedly the obligation of the management to see that production is increased through the provision of better incentives to work, the responsibility of labour organisations to put forth their best efforts and of the Provincial and Central Governments to ensure industrial harmony is no less important. We trust that the various authorities concerned will not permit production in this basic industry to be impeded. As regards the maintenance and renovation of plants, we expect that the present difficulties regarding supply of spare parts and machinery will gradually disappear and the efficiency of the plant will improve.

(*iv*) In respect of the Steel Corporation, our estimate of production of all saleable steel, as pointed out bove, is 11·61% higher than the production in 1945. The following statement gives the average number of shifts per week in 1945 and the period January/March, 1948, as also the production per shift during the two periods :—

STATEMENT II

	1945		1948 (January/March)	
	Average number of shifts per week	Production per shift	Average number of shifts per week	Production per shift
		Tons		Tons
1. Blooming Mill	10·9	413	15·9	321
2. 34″ Mill	10·6	288	11·3	262
3. 18″ Mill	11·0	105	14·4	111
4. Sheet Mill (Breakdown) 2 Units ..	29·8	67	29·3	70
5. Sheet Mill (Finising) 4 Units	58·5	28	52·5	29

(*v*) We discussed fully the possibilities of increasing production in the works of the Steel Corporation with Sir Padamji Ginwala who represented the Corporation. Although the rated capacity of the Steel Corporation is 2,75,000 tons, its representative contended that it was not possible for the Corporation to produce more than 2,00,000 tons of saleable steel, especially because the concern did not have the requisite capacity to convert the blooms into saleable steel. We were, however, not convinced that the production could not be stepped up if the Corporation worked more shifts and had proper technical supervision. The actual production in January/March, 1948, was, in fact, about 12% higher than the estimate given by the Steel Corporation. It will be seen from the immediately preceding statement that, on an average, the units are working about two shifts per week. If, therefore, more shifts are worked with necessary technical control, production can be increased.

Planning of production.

8. (*a*) Since production has a close bearing on price, we also went into the manner in which production of steel was being planned under the Iron and Steel Control. Since steel is in short supply, control over steel will have to continue for a few years more and the controlling authority will have to adjust the production plan to the demand and determine the priorities as between the requirements of the different consumers in relation to the capacity of the main producers. Under such regulation of production, the capacity of each unit of the plant may not be always utilised to the optimum level. Changes in the building programme of different authorities, urgency of certain orders, alterations in technical specifications, and similar other factors render necessary

modifications in the programmes of production from time to time. We discussed the matter with the representatives of the two steel companies and the representative of the Mysore Iron and Steel Works, Bhadravati, as well as with the Iron and Steel Controller, Government of India, and the Under Secretary to the Government of India in the Ministry of Industry and Supply. Both the Tata Company and the Steel Corporation stated that the production capacity of their plants was not being utilised to the maximum extent and suggested that they should be allowed to confine their production to those products for which their plants were specially equipped. In the written statement of the Tata Company and in the oral evidence of its representatives, we were informed that the production of finished steel would increase by 5 per cent. or 6 per cent. or by about 3,000 tons per month if the Company was allowed to have its own planning. Subsequently, however, the Company stated that, under the present abnormal conditions when the labour situation was very unsatisfactory and there was considerable difficulty in obtaining raw materials and stores and when the transport system was also dislocated, it would take about three years before the results of proper planning done by the Company itself could be achieved. The Steel Corporation also desired to have its own programme so as to utilise its capacity to the maximum and wanted a better co-ordination between its own production programme and that of the Tata Company, in view of the fact that the Tata Company had got diversified capacity while the Steel Corporation manufactured only a few categories of steel.

(*b*) We were informed that the production of steel was planned on the basis of orders received and in the light of past experience about the capacity of the plants and after due consultation with the main producers. While it is possible that there may be some room for improvement particularly in regard to co-ordination between the programmes of the Tata Company and the Steel Corporation, we consider that the principal difficulty in planning has been due to a lag in production itself. Besides, transport dislocation has also prevented the effective execution of such planning and there have been abnormally large carry-overs from previous periods, which have naturally impeded further production. It has also been pointed out to us that maladjustment arises partly because there is more re-rolling capacity in the country than steel producing capacity. Since it is the policy of Government to see that the main producers supply billets to the re-rollers who are not able to obtain imported billets owing to world shortage and high prices of steel, part of the rolling capacity of the main producers is immobilised. While we recognise that this matter is strictly outside our terms of reference, we must point out that the planning of production has a direct effect on the cost of production. We feel, therefore, that the whole question of the most effective utilisation of steel making capacity in the country in its various stages deserves early re-examination with a view to securing an economic integration of the steel industry.

Works cost.

9. We have discussed the works cost of hot metal and pig iron in our report on the fair selling price of pig iron (basic and foundry grades) which is submitted separately. We, therefore, propose to deal here with the cost of production of steel, beginning with the first stage of manufacture, *viz.*, making of ingots.

At the works of the Tata Company, ingots are produced in three units where the method of production varies, with corresponding variations in the cost of production. The quantity of ingots produced in different units and their cost of production per ton, including excise duty, along with the weighted average cost, are given below :—

	Quantity produced.	Cost of production per ton	Weighted average cost per ton.
	Tons.	Rs.	Rs.
Steel Melting Shop No. 1	2,88,000	96·62	93·19
Steel Melting Shop No. 2	5,70,000	91·17	
Steel Melting Shop No. 3	50,000	104·83	

In the weighted average cost of Rs. 93·19 per ton shown above, full credit has been allowed in respect of skull scrap. A part of this scrap is, however, unusable and therefore considered as a dead loss. When necessary adjustment is made in respect of this unusable scrap, the weighted average is increased to Rs. 93·45 per ton and this is the figure which has been adopted in estimates of cost in the subsequent stages of production.

At the works of the Steel Corporation, ingots are manufactured in only one unit and their cost of production, including excise duty, is Rs. 123·74 per ton, which is Rs. 30·29 per ton higher than the cost of production at the Tata Company's works.

The following statement gives the works costs of blooms rolled from ingots and of other products subsequently rolled from blooms at the works of the Tata Company and of the Steel Corporation :—

STATEMENT III(A)

Statement showing the summary of works cost per ton of product at the various producing units at the works of the Tata Iron & Steel Company.

Name of unit. (1)	Name of material charged. (2)	Name of products. (3)	Net cost of the material used per ton for each of the products. (4)	Average "above net material cost" per ton of production at the unit. (5)	Average adjustment for special steels rolled per ton of production at the unit. (6)	Average adjustment for "Extras" per ton of production at the unit. (7)	Average adjusted "above net material cost" per ton of product [5—(6+7)] (8)	Net adjusted "above net material cost" of each product per ton. (9)	Total works cost per ton of product (untested quality) (4+9). (10)
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Blooming Mill	Basic steel ingots ..	(1) Blooms ordinary ..	100·85	7·95	0·21	..	7·74	7·11	107·96
		(2) Slabs ordinary ..	115·24					11·85	127·09
		(3) Blooms acid ..	208·99					28·44	237·43
		(4) Slabs acid ..	235·10					21·33	256·43
2. Sheet Bar and Billet Mill ..	Blooms ordinary ..	(1) Tin bars ..	110·43	4·46	..	0·04	4·42	4·30	114·73
		(2) Flat bars ..	122·19					4·62	126·81
..		(3) Sleeper Bars ..	116·25					5·38	121·63
		(4) Hoe bars ..	111·01					6·46	117·47
		(5) Billets ..	110·13					4·30	114·43
		(6) Sheet bars ..	112·60					4·30	116·90
3. New Rail Mill	Blooms ordinary ..	(1) Rails (heavy) ..	115·02	32·49	..	8·11	24·38	17·39	132·41*
		(2) Structurals ..	116·08					28·51	144·59
		(3) Heavy bars ..	116·08					28·51	144·59
		(4) Bearing plates and crossing sleeper bars.	116·08					28·51	144·59
		(5) Billets	116·73					28·58	145·31

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4. General Bar Mill	Billets	(1) Structurals ..	126·21	100·19	10·31	8·61	81·27	77·16	203·37
		(2) Light bars ..	126·22					72·95	199·17
		(3) Light rails ..	127·20					70·13	197·33
		(4) Fishplates for light rails.	127·20					143·11	271·04
		(5) Fishplates for heavy rails.	127·97					183·46	211·43*
5. Merchant Mill	Billets	(1) Light bars ..	121·54	23·73	0·26	13·58	9·89	9·89	131·43
		(2) Structurals ..	121·54					9·89	131·43
6. Sheet Mill	Sheet bars	Black sheets ..	114·41	63·01	0·50	25·77	36·74	36·74	151·15†
7. Galvanizing Plant ..	Black Sheets (hard) ..	Plain galv. sheet (hard)	243·63	44·99	..	..	44·99	44·99	288·62‡
	Black Sheets (soft) ..	Plain galv. sheet (soft)	249·20					44·99	294·19
8. Corrugating Plant ..	(1) Plain galv. sheet (hard)	Galv. corr. sheet (hard)	283·78	9·58	..	..	9·58	9·58	293·36§
	(2) Plain galv., sheets (soft)	Galv. corr. sheet (soft)	293·81					9·58	303·39
9. Plate Mill	(1) Slabs ordinary ..	Plates ordinary ..	131·88	59·39	..	13·73	45·66	45·41	177·29
	(2) Slabs acid ..	Plates acid steel ..	307·28					54·48	361·76
10. Sleeper Press	Sleeper bars ..	Pressed sleepers ..	121·63	38·15	..	..	38·15	38·15	159·78*
11. Wheels, Tyres and Axles Plant. ..	(1) Acid Ingot ..	Wheels and Tyres ..	265·98	174·45	..	..	174·45	174·45	440·43*
	(2) Acid Blooms ..	Axles	321·36	167·94	..	..	167·94	167·94	489·30*

*Tested †(11-14 gauge) ‡Tested or untested 24 G. § Tested or untested.

STATEMENT III(B)

Statement showing the summary of works cost per ton of product at the various producing units at the works of the Steel Corporation of Bengal.

Name of unit. (1)	Name of material charged. (2)	Name of the products. (3)	Net cost of material used per ton of each of the products. (4)	Average "above net material cost per ton of production at the unit. (5)	Average adjustment for special steels rolled per ton of production at the unit. (6)	Average adjustment for "Extras" per ton of production at the unit. (7)	Average adjusted "above net material cost per ton of production [5—(6+7)]. (8)	Net adjusted "above net material cost of each product per ton. (9)	Total works cost per ton of product (untested quality) (4+9). (10)
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Blooming Mill	Ingots	Blooms	128·39	8·76	..	..	8·76	8·76	137·15
2. 34" Mill	Blooms	(1) Heavy rails ..	146·00	18·58	..	0·53	18·05	22·35	168·35
		(2) Structurals ..	143·09					35·49	178·58
		(3) Sheet bars ..	142·64					15·07	157·71
		(4) Billets ..	142·62					21·03	163·65
3. 18" Mill	Blooms	(1) Light rails ..	144·53	29·78	..	7·92	21·86	41·50	186·03
		(2) Structurals ..	142·36					21·94	164·30
		(3) Light bars ..	143·31					31·13	174·44
		(4) Billets ..	144·93					17·46	162·39
4. Sheet Mills	Sheet bars	Black sheets ..	173·01	65·53	..	23·22	42·31	42·31	215·32*
5. Galvanizing Plant ..	(1) Black sheets (hard)	(1) Plain galvanized sheets (hard).	299·49	37·52	..	..	37·52	37·52	337·01
	(2) Black sheets (soft)	(2) Plain galvanized sheets (soft)	306·38					37·52	343·90†
6. Corrugating Plant	Plain galvanized sheets (hard)	Galvanised corrugated sheets (hard)	337·01	3·03	..	..	3·03	3·03	340·04‡

* (11/14 Gauge) † Tested or untested 24 G. ‡ Tested or untested.

These two statements need explanation. Column 4 gives the net cost per ton of materials used for each of the products. Column 5 gives the average above net material cost (*i.e.*, operating cost) per ton of production at the unit. In the case of the Tata Company, this cost includes the cost of rolling certain special steels which do not come within the scope of this inquiry. The estimate of extra cost incurred in rolling these special steels has been given in column 6 and suitable adjustments have been made in column 8. The average " above net material cost " given in column 5 includes also the extra cost incurred in manufacturing sizes, sections, gauges and qualities other than those mentioned in the Iron and Steel Control Price Schedule for base price items. As we have to determine the retention price of base price items, it is essential to eliminate the extras earned on sizes other than base items. The estimate of extras thus earned has been given in column 7 and necessary adjustments made in column 8. We must, however, point out that we had no adequate data in regard to the cost incurred in manufacturing various sizes, sections and gauges. In estimating the amounts earned through extras, we have, therefore, taken the rates as published in the Extras List of the Iron and Steel Control Price Schedule as equivalent to the cost of production of extra sections and gauges. So far as the Tata Company's works are concerned, we have taken the actual rate per ton earned through extras during the months of April/September, 1948, except in regard to black sheets. In respect of black sheets, we had the estimates of production of different gauges and, consequently, have estimated the extras on the basis of such production.

The Steel Corporation did not submit the details of receipts per ton in respect of extras on various categories of steel either during the current year or the past year. The figure for the total sum earned by the Steel Corporation through extras during 1947 was, however, made available to us. We also obtained the figure for the quantity of black sheets despatched in 1947, but the amount of extras earned in respect of black sheets was not known. We, therefore, estimated the total amount of extras that would have been earned by the firm on its production of black sheets, gauge by gauge, on the basis of the rates given in the Extras List of the Iron and Steel Control, and then found out the average rate of extra per ton of black sheets. Extras are, however, earned only on despatches. Consequently, we applied this average rate to the total quantity of black sheets despatched in 1947, and thus obtained the figure for the total amount of extras earned on black sheets despatched in 1947. The amount thus obtained was deducted from the total amount of extras earned on all categories of steel in 1947, and the balance was taken as the amount of extras earned on structurals and bars despatched in 1947. On the basis of this average rate of extras per ton of structurals and bars, we estimated the amount of extras that would be earned on the production of these categories of steel in 1948. In respect of black sheets, as in the case of the Tata Company, extras have been estimated on the basis of the estimated production of different gauges.

In column 8, the adjusted net material cost of production at each unit is given. In column 9, the ' above net material cost ' of different products manufactured in each unit is adjusted on the basis of relative production per shift. In column 10, the total of columns 4 and 9 is given, which constitutes the works cost of different products (*viz.*, base price items) at each unit. As similar products are rolled in more than one unit, the weighted average cost of such items has to be taken in fixing the retention prices. The following statement gives the production and the weighted average works costs of all categories of saleable steel at the works of the two companies :—

STATEMENT IV.

Statement showing the weighted average works costs of the base items of steel.

	Untested quality.	
	The Tata Company	The Steel Corporation.
Controlled Categories—	Rs.	Rs.
1. Blooms	107·96	137·15
2. Billets	117·81	163·02
3. Tin Bars	114·73	..
4. Sheet Bars	116·90	..
5. Hoe Bars	117·47	..
6. Sleeper Bars	121·63	..
7. Rails (Heavy) (50/100 lbs)	132·41*	168.35*
8. Structurals, Bearing Plates and Crossing Sleeper Bars	143·00	166.58
9. Plates (Ordinary Steel) 3/8″ and up	177·29	..
10. Bars and Rods (Rounds and Squares below 3″ and Flats upto and including 5″ wide).	137·59	174.44
11. Bars other sizes (Rounds and Squares 3″ and above and Flats over 5″ wide).	138·27	..
12. Light Rails 30 lbs. and below	197·33	186.03
13. Fishplates for Havy Rails—Class A	211·43*	..
		..
14. Fishplates for Light Rails	271·04	..
15. Black Sheets 11-14 gauges	151·15	215.32
16. Galvanized Plain Sheets (Soft Iron) G 24-6′/10′ ..	294·19	343·90
17. Galvanized Corrugated Sheets (Hard Iron) G. 24—6′-10′	293·36	340·04
Uncontrolled Categories—		
18. Pressed Sleepers	159·78	..
19. Wheels and Tyres (Acid Steel)	440·43	..
20. Axles (Acid Steel)	489·30	..

* Tested quality.

The works costs given in the above statement relate to the base price items of the Iron and Steel Control Price Schedule for untested materials only, except in respect of rails (heavy) and fishplates for heavy rails which are produced only in tested quality. The works costs of blooms, billets and other 'semis' and galvanised corrugated sheets are in respect of both tested and untested qualities. Moreover, it has not been possible to determine the works costs of a few categories of plates, the production of which is nominal, and details regarding whose costs of production are not available. These categories are boiler plates, chequered plates, plates 1/8″ unannealed, and plates 1/8″ annealed. We are, however, satisfied that the present difference between the plates (3/8″ and up) and the above items is reasonable and may be maintained. In respect of sleepers, wheels tyres and axles, the works costs of various sizes have not been investigated and the costs of those items shown in column 2 of the above statement are the average costs of all sizes.

Comparison between the works costs of the Tata Company and the Steel Corporation.

10. The following statement gives the final works costs of the Tata Company and of the Steel Corporation for comparable items :—

STATEMENT V.

Statement showing the weighted average works costs of the Tata Company and of the Steel Corporation in respect of comparable items.

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	Untested quality.	
	The Tata Company.	The Steel Corporation.
	Rs.	Rs.
1. Blooms	107·96	137·15
2. Billets	117·81	163·02
3. Rails (heavy) (50/100 lbs.)	132·41*	168·35*
4. Structurals, Bearing Plates and Crossing Sleepers Bars ..	143·00	166·58
5. Bars and Rods (Rounds and Squares below 3″ and Flats upto and including 5″ wide.)	137·59	174·44
6. Light Rails (30 lbs. and below)	197·33	186·03
7. Black Sheets 11—14 gauges	151·15	215·32
8. Galvanized Plain Sheets (Soft Iron) G 24-6′/10′	294·19	343·90
9. Galvanized Corrugated Sheets (Hard Iron) G. 24-6′/10′ ..	293·36	340·04

*Tested quality.

(*a*) *Ingots.*—Our estimate of works costs of ingots manufactured by the Steel Corporation is Rs. 123·74 per ton as against Rs. 93·45 per ton of the Tata Company. In other words, the Steel Corporation's cost of ingots is higher than that of the Tata Company by Rs. 30·29 per ton. The principal reasons for this difference are (*i*) higher cost of materials, (*ii*) higher expenditure on refractories, and (*iii*) higher general works expense.

(*i*) As the Steel Corporation is not producing its own hot metal, it obtains hot metal from the Indian Iron and Steel Company on the basis of the works cost of the Indian Iron and Steel Company *plus* overheads and profits on terms mutually agreed upon. We examined the works cost of the Indian Iron and Steel Company and, in our calculations, we have taken the works cost as arrived at by us, but we have not disturbed the Steel Corporation's agreement with the Indian Iron and Steel Company as regards overheads and profits. On this basis, the cost of hot metal to the Steel Corporation would be Rs. 69 per ton. The hot metal cost of the Tata Company, on the other hand, comes to Rs. 46·36 per ton. It should, however, be pointed out that, in respect of the Tata Company, overheads and profits are not included in the cost of hot metal charged to steel making. But even if overheads and profits are excluded from the Indian Iron and Steel Company's price for hot metal charged to the Steel Corporation, its cost of production of hot metal will be Rs. 62·45 which will be higher than the cost of the Tata Company by Rs. 16·09 per ton.

(*ii*) Another factor which increases the cost of ingots produced by the Steel Corporation is the higher expenditure due to the excessive use of refractories, including dolomite. This matter was discussed with the management of the Steel Corporation who admitted that the expenditure was high but attributed it to several factors including the inexperience of the staff and the inferior quality of the pig iron. In the Tata Company, expenditure on account of refractories, including dolomite in the three melting shops, per ton of steel ingot, is the highest in steel melting shop No. (1), which comes to Rs. 2·78 per ton as against the Steel Corporation's cost of Rs. 7·15 per ton. We consider this cost to be on the high side, but as we have accepted as a general principle the current costs in arriving at the works cost, we do not propose to make any reduction on this account. We, however, strongly recommend that the Steel Corporation should take immediate steps to effect a substantial reduction in its expenditure on refractories and dolomite.

(*iii*) The general works expense of the Steel Corporation is also higher than that of the Tata Company by about Rs. 3 per ton. This is partly due to the fact that the plant of the Steel Corporation is not balanced and partly due to its not working to its full capacity.

(*b*) *Blooms.*—The works costs of blooms at the Tata Company's works and the Steel Corporation's works are Rs. 107·96 and Rs. 137·15 per ton, respectively. The difference of Rs. 30·29 per ton at the ingot stage comes down to Rs. 29·19 per ton at the bloom stage. We would like to mention that the blooming mill of the Steel Corporation is a new unit and should show higher production.

(*c*) *Billets.*—The average works cost of billets of the Tata Company is Rs. 117·81, being the weighted average of the cost at the sheet bar and billet mill (Rs. 114·43) and the rail mill (Rs. 145·31). The quantity rolled at the rail mill is, however, only 24,000 tons as compared to 1,95,414 tons rolled at the sheet bar and billet mill. Since the latter unit is a more suitable plant for rolling billets, the costs of production there are lower than at the rail mill. At the works of the Steel Corporation, billets are rolled at 34″ and 18″ mills. Both these mills are finishing mills as well and are, generally speaking, not well equipped for rolling billets. The Steel Corporation's production of billets is also small and amounts to 36,000 tons at each of its mills. The weighted average cost of production of billets at the Steel Corporation's works is Rs. 163·02 per ton, being Rs. 45·21 per ton higher than that at the Tata Company's works and Rs. 17·71 higher than the cost at the Tata Company's rail mill. As the plants in which billets are rolled at the two works are not identical, it is difficult to compare the relative conversion costs. The main reasons for the higher cost of billets at the Steel Corporation's works are (*i*) higher ingot cost and (*ii*) the smaller quantity of billets rolled in units which are not best suited for the purpose.

(*d*) *Rails, structurals, bars and other categories.*—The Steel Corporation's costs of production of all these categories are higher than those of the Tata Company and the reasons are similar to those indicated above in respect of ingots and blooms. There is, however, one item in which the cost of the Tata Company is higher than that of the Steel Corporation, namely, the cost of light rails. The reason is that light rails are rolled at the Tata Company's works at the bar mill which is old and uneconomic.

(*e*) *Sheets.*—The works costs of sheets require a closer analysis. We have fixed the price of sheets on the basis of black sheet (11-14 gauge) and galvanised corrugated sheet (24 gauge 6′/10′). The over-all works costs of these two items at the two works are :

	Tata Company.	Steel Corporation.
	Rs. per ton.	Rs. per ton.
Black sheets (11-14 gauge)	151·15	215·32
Galvanised corrugated sheets (Hard Iron) 24 G-6′/10′	293·36	340·04

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(*i*) *Black sheets.*—The Steel Corporation's cost of black sheets of 11-14 gauge is higher than that of the Tata Company by Rs. 64·17 per ton. The break-up of the works costs at the two works is as follows :—

	Tata Company	Steel Corporation
	Rs. per ton.	Rs. per ton.
Total Material cost	146·13	197·14
***Less*—**		
Credit for scrap	31·72	24·13
Net material cost (A)	114·41	173·01
"Above net material cost" (*i.e.*, operating cost)	62·51	65·53
***Less*—**		
Adjustment for "Extras"	25·77	23·22
Adjusted "above net material cost" (B)	36·74	42·31
Total works cost [(A) plus (B)] ..	151·15	215·32

The higher total material cost of the Steel Corporation is due to its higher cost of sheet bar which is rolled into sheets and the reason for this is the same as that for ingots, blooms and billets. In the Steel Corporation's works, the credit for scrap is lower than that at the Tata Company's works by Rs. 7·59 per ton. This lower credit is mainly due to a smaller quantity of scrap being available for sale than in the Tata Company and also due to the difference in the quality of scrap as the gauges rolled are different. The difference in gauges rolled also accounts for a lower credit for extras in the case of the Steel Corporation. The difference in the "above net material cost" at the two works is only Rs. 5·57 per ton. This difference is mainly due to the higher general works expenditure of the Steel Corporation, which is Rs. 17·85 per ton as against Rs. 9·38 in the case of the Tata Company. It may, however, be noted that, in items like 'Labour', 'Stores', and 'Stocking and Shipping', the Steel Corporation's costs are lower than those of the Tata Company.

(*ii*) *Galvanised sheets.*—The Steel Corporation's cost of galvanised sheets (corrugated 24 gauges 6'/10') is Rs. 340·04 per ton as against the Tata company's cost of Rs. 293·36 per ton. The difference between the two costs is thus Rs. 46·68 per ton. The break-up of the cost is given below :—

Items of cost of galvanised sheets	Tata Company	Steel Corporation
	Rs. per ton.	Rs. per ton.
Cost of black sheets	174·21	237·92
Net cost of spelter	69·42	61·57
Galvanising cost	44·99	37·52
Corrugating cost	9·58	3·03
	298·20	340·04
Less—		
Deductions made for—		
(1) use of extra spelter for special quality sheets ..	4·62	
(2) Scrap	0·22	
	293·36	340·04

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The works cost of galvanised sheet in both the works is higher than what it should be, but for different reasons. The Steel Corporation's cost of black sheet is higher than that of the Tata Company by Rs. 64·17 for reasons already explained. But the Steel Corporation's net cost of spelter is lower than that of the Tata Company by Rs. 7·85 per ton because spelter consumption at the works of the Tata Company is as high as 207 lbs. per ton of galvanised sheet as against 173 lbs. in the works of the Steel Corporation. Similarly, galvanising cost is also lower at the works of the Steel Corporation than at that of the

Tata Company. But it may be pointed out that the galvanising cost at the Steel Corporation's works can be reduced still further as its cost of sulphuric acid per ton of galvanised sheet is as high as Rs. 18·33 as against the Tata Company's cost of Rs. 4·82. This is partly due to the higher price of sulphuric acid paid by the Steel Corporation and partly due to the higher consumption of sulphuric acid which the company itself has admitted. After carefully considering this point, we have reduced the cost of sulphuric acid by Rs. 6 per ton and brought it down to Rs. 12·33. The lower cost of sulphuric acid of the Tata Company is mainly due to the fact that the Company is manufacturing its own sulphuric acid. In spite of the Steel Corporation's higher cost of sulphuric acid, the galvanising and corrugating costs of the Tata Company are higher, which is partly due to the higher 'Stocking and Shipping' charges. This matter has been discussed with the Tata Company which has agreed that a reduction under this head is possible; and, after careful consideration, we have reduced the galvanising and corrugating costs of the Tata Company by Rs. 6 per ton.

We recommend that both the concerns should reduce the galvanising and corrugating costs. In the case of the Tata Company, this is possible by reducing its spelter consumption and also by reducing the 'Stocking and Shipping' charges. The Steel Corporation also should reduce its cost by reducing the consumption of sulphuric acid.

Estimate of overhead charges.

11. Having analysed the works costs in the preceding garapraghs, we now proceed to deal with the overhead charges, *viz.*, depreciation, interest on working capital, managing agent's commission and head office charges, selling expenses, and return on fixed capital.

(a) *Depreciation.*—In determining the amount of depreciation, we have to consider the valuation of the block of the steel companies. The representatives of the industry contended that depreciation should be calculated on the replacement value of the plant and machinery. This was also the practice of the previous Tariff Boards which investigated the case of the steel industry before the war. We have already dealt with this question in our reports on the prices of cotton yarn and cloth as well as of paper, in which we have pointed out certain practical considerations which make it difficult for us to accept replacement cost as a basis for purposes of depreciation as also for return on fixed capital, although we ecognise the vital importance of replacement. The proposal that depreciation allowance should be based on replacement costs has been found unacceptable even by professional accountants who feel that there is an element of uncertainty and arbitrariness in such a procedure. Instead, they prefer the basis of historical cost, both for depreciation of fixed assets and for the valuation of stocks. They also suggest that additional sums provided for replacement should be regarded as reserves and treated as such in the accounts. Moreover, there are other practical difficulties such as the possibility that costs of replacement might occasionally fall as also the fact that replacement "does not always or necessarily involve the installation of an identical machine". In regard to the steel industry, there are also certain peculiar features to which we would like to draw attention Apart from the difficulty, which is common to all industries, of importing capital goods owing to the high prices of plant and machinery, it has been represented to us that there is a thin line of demarcation in the steel industry between replacement and removal of obsolescence on the one hand and expansion and improvement on the other. This makes it difficult to define what " replacement " means in practice and estimate what the replacement cost would be. Since it is not practicable to relate depreciation to replacement value at present when the cost of replacement is about two or three times the original cost of the block and since the depreciation allowed by the income-tax authorities is inadequate for replacement at current cost, the Tata Company suggested that, in its case, allowance for depreciation should be made on its gross block of Rs. 38·38 crores. And the Steel Corporation of Bengal claimed an allowance of Rs. 40 lakhs per annum which was the maximum it has so far been able to set aside every year which was approximately equal to the income-tax allowance. Both the steel companies agreed that such amount as is allowed for depreciation should be compulsorily set aside for the purpose every year in a separate fund. When these suggestions were being examined by us, the new rules regarding the depreciation allowance, which were announced by the Government of India on 22nd October, 1948, were not yet known. Subsequently, the Tata Company informed us that, according to its provisional calculation, the company would be entitled to an allowance of Rs. 2,00 lakhs under the new rules as against its claim for Rs. 240 lakhs at the rate of 6¼ per cent. on a block of Rs. 38·38 crores. On an analysis of the provision made for depreciation and reserves during the last ten years which mark a period of prosperity for the Tata Company, we found that the average provision for depreciation was Rs. 122 lakhs and for reserves Rs. 66·7 lakhs, or Rs. 188·7 lakhs for both. During each of the last two years, the Company has set aside more than Rs. 2,00 lakhs for depreciation and reserves. The provision made by the Company for depreciation includes also collieries. In making our own estimate, however, we have separated the block in respect of collieries. We therefore, consider that an allowance of Rs. 2,00 lakhs on a block of Rs. 35 crores as estimated by us in a subsequent paragraph will be reasonable. According to the revised income-tax rules, the Steel Corporation would be entitled to a slightly higher allowance for depreciation than Rs. 40 lakhs as originally claimed by the Corporation. We have, therefore, allowed Rs. 45 lakhs for depreciation in the case of the Steel Corporation.

(b) *Interest on working capital.*—The Tata Company submitted an estimate of its requirements of working capital amounting to Rs. 720 lakhs. We examined the estimate in the light of the Company's requirements of raw materials, wages and salaries, stores and provisions, and stock-in-trade. We also discussed the various issues involved in this question with the Company so as to determine a reasonable amount to be allowed as working capital. After careful consideration, the Company agreed that the working capital might be taken at Rs. 6,00 lakhs, which we considered reasonable and accepted.

The Steel Corporation also submitted a similar estimate which came to Rs. 281 lakhs. We discussed this estimate with the representatives of the Corporation and eventually they agreed to a figure of Rs. 2,00 lakhs which we considered reasonable and accepted.

Both the companies claimed interest on working capital at 4 % per annum. In view of the present condition of the money market, we have allowed the rate asked for by the companies. On this basis, in the case of the Tata Company interest on working capital will amount to Rs. 24 lakhs, while in the case of the Steel Corporation it will be Rs. 8 lakhs.

(c) *Return on block.*—(*i*) After discussion with the representatives of the two companies, and after careful consideration, we have decided to base the return on the gross block. It is out of this return that provision will have to be made for taxation, managing agency commission, profit-sharing bonus, dividends, and reserves. The gross block of the Tata Company amounts to Rs. 38·66 crores. The Company has agreed that, out of this, Rs. 28 lakhs might be deducted on account of the block for Agrico, miscellaneous properties, furniture, and controlled stockyards. Thus, the block comes to Rs. 38·38 crores. From this amount, we have excluded Rs. 3·14 crores for collieries, the return on which we have calculated separately. After these deductions, the gross block comes to Rs. 35·2 crores. This amount includes Rs. 62 lakhs for the new billet mill whose production we have not taken into consideration in working out the cost. If we exclude this amount, the value of the block is further reduced to Rs. 34·62 crores which we have rounded off to Rs. 35 crores. We propose to allow a return on this block.

(*ii*) The Tata Company has asked for Rs. 26 lakhs as managing agency commission, Rs. 55 lakhs as profit sharing bonus, and Rs. 309 lakhs as residual profits to provide for dividends. The total amount under the above three heads comes to Rs. 390 lakhs.

(*iii*) In claiming that the return allowed on the block should provide for profit sharing bonus, the Tata Company argued that, although this bonus was related to profits, it was regarded by labour as part of its remuneration which should not fluctuate with the profits of the Company. The Company, therefore, urged that it was not practicable to reduce the amount to anything below Rs. 55 lakhs per annum, being equal to two months' wages bill; and that any attempt to do so might lead to serious labour trouble which, in its turn, might bring down production. This means that what was designed to be an incentive for greater production has become more or less part of the wage structure which cannot be disturbed. The resulting situation is anomalous and complicated. The whole question of profit sharing is at present under consideration by Government who are examining the report submitted by a Special Committee appointed to go into the matter. In these circumstances, and in view of the importance of stable industrial relations in the steel industry and the manner in which the system of profit sharing bonus has developed in the works of the Tata Company, we have taken this into account in determining the return on the block.

(*iv*) The Tata Company also asked for an adequate provision for payment of dividends. The Company stressed before the Commodities Prices Board as well as in the present inquiry, that any large reduction in dividend from what had been obtained during the last two years would adversely affect the investment market. It was argued on behalf of the Company that steel shares, particularly the ordinary and deferred shares of the Company, were the leading scrips in the share market and that no reduction in their dividend should be made as would prejudicially affect their values on the stock exchange. We recognise the importance of steel shares in India in relation to the investment market. But we are unable to agree that in a regime of controlled prices, an industry should be guaranteed a certain level of profits mainly in order to maintain the speculative value of its shares. In this connection, we must point out that, of the total paid up capital of the Company, amounting to Rs. 10,52,00,000, Rs. 7,75,00,000 is subscribed through preference shares, while Rs. 2,62,00,000 is subscribed through ordinary shares, and Rs. 14,62,000 through deferred shares. The par value of a deferred share is only Rs. 30, but in 1917, 26,250 shares were sold at a premium of Rs. 370. During the last ten years, the average annual dividend paid on ordinary shares amounted to 29·9 per cent., while on deferred shares without premium it was 417·6 per cent. and, with premium, 54·6 per cent. During the last year, the dividend declared on an ordinary share was 18·7 per cent., that on a deferred share without premium 216·6 per cent., and, with premium, 28·3 per cent. From the inception of the Company, the average dividend on ordinary shares has been 11·8 per cent. and that on deferred shares inclusive of premium has been 22·51 per cent. On the other hand, 73·7 per cent. of the paid up capital of the Company raised through preference shares has been earning a fixed dividend of 7·3 per cent. It is true that the return on preference shares cannot strictly be compared with that on ordinary and deferred shares, as the return on the former class of shares is guaranteed while the return on the latter classes of shares is not so. Nevertheless, while the capital of the Tata Iron and Steel Company raised through ordinary and deferred shares is 25 per cent. and 1·4 per cent., respectively, of the total paid up capital, the return on these two classes of shares has recently been out of proportion to the earnings on preference shares. This has placed these two classes of shares, and particularly the deferred shares, in a privileged position which is reflected in the values of these shares on the stock exchange. The Company realises this anomalous position and has been endeavouring to modify and improve its present capital structure by converting the deferred shares into ordinary ones. We recommend that the proposed reconstruction of the share capital should be carried out at an early date.

We have carefully examined the claim of the Tata Company in regard to the various items mentioned above and have come to the conclusion that a return of 8 per cent on its block of Rs. 35 crores, amounting to Rs. 280 lakhs, would be reasonable.

(*v*) The block value of the Steel Corporation of Bengal is estimated at Rs. 7½ crores. The Corporation has claimed Rs. 4,20,000 as managing agency commission, Rs. 60 lakhs as profit for distribution as dividends, and Rs. 12 lakhs as the Indian Iron and Steel Company's share of 20 per cent. of the Steel Corporation's profits. The total amount claimed comes, therefore, to Rs. 76,20,000. The Corporation suggested that the Indian Iron and Steel Company's share of the profit should be provided separately. But, as this item is related to the profits of the Steel Corporation, we have included it in the return to the Steel Corporation. We must, however, point out that, in the course of our inquiry both into steel and pig iron prices, we were impressed with the necessity of an amalgamation of the Steel Corporation of Bengal with the Indian Iron and Steel Company. The two concerns have an agreement under which hot metal is supplied by the Indian Iron and Steel Company to the Steel Corporation as also ancillary services, such as power, water and gas. We do not propose to go into the reasons why the Steel Corporation entered into an agreement with the Indian Iron and Steel Company. This agreement might have been essential at the time when the Steel Corporation was first started. Nor are we concerned with the comparative advantages of this agreement for one side or the other. But, in the larger interests of the steel industry, we feel that an amalgamation of the Steel Corporation with the Indian Iron and Steel Company would now be desirable. Such an amalgamation would secure uniform and coherent management, thus avoiding duplication and waste, which would ultimately tend to reduce costs of production of steel which are high as compared with those of the Tata Company. We therefore, recommend that the Steel Corporation and the Indian Iron and Steel Company should examine at an early date the possibility of integrating the two plants through amalgamation.

(d) *Head office and selling expenses.*—(*i*) The Tata Company has claimed Rs. 19 lakhs per annum as head office expenses and an average of Rs. 16·29 lakhs per annum as selling expenses. We have not scrutinised these expenses but have accepted the figure of Rs. 19 lakhs claimed by the Company so far as the head office expenses are concerned. As regards selling expenses, we have allowed Rs. 14 lakhs per annum, which will work out, in round figure, to Rs. 2 per ton. The total amount allowed on account of head office expenses and selling expenses in the case of the Tata Company will, therefore, come to Rs. 33 lakhs.

(*ii*) The Steel Corporation has claimed Rs. 10 lakhs per annum as head office expenses, which figure also we have accepted. As regards selling expenses, we have allowed Rs. 4 lakhs per annum which will work out to about Rs. 2 per ton. The total amount allowed under both heads in the case of the Steel Corporation will thus come to Rs. 14 lakhs.

Allowance for extra cost of coal to the Tata Company.

12. In arriving at the works cost of the Tata Company, we have taken into account the statutory price of coal. The Company has pointed out, however, that the cost of raising of its own coal, which constitutes nearly 60 per cent. of its total consumption, is higher than the statutory price and has requested that its own cost should be taken into account in arriving at the works cost of steel. We have examined this claim in regard to the increased cost of raising its coal. Since in our estimates we have accepted the current costs of materials as given by the Company, we consider that some allowance should be given to the Company for the higher cost of its own coal. The Company's cost of raising coal is Rs. 14-8-0 per ton. If we allow Rs. 1-8-0 per ton as profit, as allowed by Government in determining coal prices, the Tata Company should get Rs. 16 per ton for its own raisings. The average (weighted) purchase price of steam and coking coal at the statutory rate, however, is Rs. 15 per ton. In other words, if we take the statutory rates, the Company will lose about Re. 1 per ton of coal on about 60 per cent. of its consumption. We do not desire that the Company

should be adversely affected because of conditions beyond the Company's control at present and we have, therefore, allowed a sum of Rs. 10 lakhs for the extra cost of raising its own coal.

Margin for contingencies.

13. After the estimates of works costs had been prepared, both the companies contended that our calculations had been meticulous and that, since the present inquiry was concerned with price fixation, some allowance should be made for any fluctuations in costs as well as for modifications in the production programme. One of the companies in a series of letters drew our attention to the need of providing a " cushion " for adjustments in the cost of various items, such as iron ore, labour, limestone and several others. It may be admitted that in a period of economic instability minor fluctuations in costs are likely to take place and the net effect of such fluctuations may sometimes be to increase the cost of production above our estimates. We, therefore, consider that the claim of both the companies for a suitable allowance for such a contingency is not unreasonable. We have, therefore, allowed an overall margin or " cushion " of Rs. 30 lakhs in overheads in respect of the Tata Company and Rs. 10 lakhs in respect of the Steel Corporation.

Allocation of overheads.

14. (*a*) In the preceding paragraphs, we have discussed the overheads, including manufacturers' profits allowed by us so as to give the companies a fair retention price. Before we proceed to allocate the overheads, we recapitulate below the various items :—

	Tata Company	Steel Corporation
	Lakhs of Rupees	Lakhs of Rupees.
1. Depreciation	200	45
2. Interest on working capital	24	8
3. Return on block	280	60
4. Head office expenses	19	10
5. Selling expenses	14	4
6. Extra cost of coal	10	..
7. Margin for contingencies	30	10
Total ..	577	137

In the case of the Tata Company, the total amount mentioned above includes overheads on surplus pig iron, on surplus ferro-manganese, and on special steels. It also includes realisations on account of the supply of water and electricity to subsidiary companies. On the above items, we propose to deduct a sum of Rs 24 lakhs, thereby reducing the total amount of overheads for allocation to Rs. 553 lakhs. The break-up of this amount of Rs. 24 lakhs is as follows :—

	Lakhs of Rupees
Overheads on surplus pig iron	7
Overheads on surplus ferro-manganese	4
Extra overheads on special steels	5
Realisations on account of supply of water and electricity	8
Total ..	24

(*b*) In an integrated plant where various products, many of which are interdependent, are manufactured simultaneously, it is not easy to devise a method for a precise allocation of overheads, profits and other items which are not specifically chargeable to a particular product. Nor is there any uniform or recognised method for such allocation. This difficulty is due to the fact that the exact capital cost of a unit and the value of the contribution it makes by itself towards the manufacture of a product, which passes through various processes until it is ready for sale, cannot be ascertained. Moreover, an appreciable portion of the total capital expenditure is incurred on auxiliary plant and machinery which serve different units in varying degrees, and this makes it difficult to assess the value of such auxiliary services. Lastly, in a steel plant, two of the major units, namely, the melting shop and the blooming mills, have no separate earning capacity by themselves. If any overheads or share of other expenses are charged to these units, they would be passed on to the finishing units in varying proportions. The finishing units, where a variety of products are rolled, present the same difficulty of apportioning the charges to individual products. The former Tariff Boards which enquired into the steel industry appreciated these difficulties. They, therefore, allocated such charges according to the view they took of the cost of equipment and plant used for the manufacture of these products and their works costs, the quantity produced, the amount which each one of them should bear, the needs of the normal consumer, the demand for the product, and the price it would fetch without restricting the demand. The Tariff Board of 1926, for instance, stated that it would not be justifiable to burden a semi-finished product with the same overhead charges and profit per ton as an expensive product. It did not, therefore, apply a uniform scale for overheads and profits but allocated these to different products on the basis of what the Board believed to be a fair allotment after consideration of the works cost and the value of the plant utilised. The Tariff Board of 1934 also allocated overheads and profits at different rates according to what it believed to be the most suitable proportion for each class of product, taking into account the works costs, the value of the plant, and the conditions of the market in respect of each product The Steel Corporation stated that, so long as the retention prices of different products were so fixed as to enable the Corporation to recover the estimated overheads and profits from the sale of its products, it was immaterial in what proportion the charges were allocated by the board. The Tata Company, on the other hand, suggested that the overheads should be allocated equally on all products but that a smaller amount should be allocated on 'semis'.

(*c*) Incidentally, our examination of the costs has disclosed certain anomalies in the current schedule of ex-works retention prices for different categories of steel. Thus, for example, while the retention prices for billets is Rs. 190 per ton and that for galvanised sheets Rs. 332 per ton, their respective works costs at the Tata Company's works come to Rs. 117 and Rs. 287 per ton. This means that billets take an overhead of Rs. 73 per ton whereas galvanised sheets get an overhead of only Rs. 45 per ton. This anomalous position has been brought about by the uniform increases made in the past in the prices of all categories of saleable steel, without ascertaining the costs of individual products.

(*d*) In allocating the overheads, we have taken into consideration the works cost, the plant and equipment employed, and the other factors which the previous Tariff Boards took into consideration, as well as the foreign prices of similar products.

(*e*) While allocating the overheads we have taken into consideration only the quantity that would be available for sale; overheads have not been allocated on the quantity consumed in the works for maintenance purposes. In the Tata Company, the quantity available for sale is estimated at 6,66,122 tons and in the Steel Corporation it is taken as 2,21,236 tons. Moreover, it must be pointed out that the production on which overheads are distributed includes products which are "non-standard" and defective. As the realisation on the sales of such products is less than on the standard ones, we have allowed a reduction of Rs. 10 per ton in respect of these items. In other words, overheads have been so distributed that standard products will bear Rs. 10 per ton more than products which are "non-standard" and defective. The quantity of products grouped as "non-standard" and defective in respect of which such a reduction is made in our calculations, comes to 19,823 tons in the case of the Tata Company and 6,640 tons in the case of Steel Corporation.

Fair retention prices.

15. We now give below the works costs and overheads for each product, the fair retention prices for each product determined by us, the existing ex-works retention prices and also a comparative statement of fair retention prices in respect of the two companies :—

STATEMENT VI

(1) *The Tata Iron and Steel Company.*

Board's Estimate of the works costs, overheads, and ex-works fair retention prices.

Serial No.	Name of the product (untested quality)	Works cost per ton	Overheads per ton	Estimated ex-works fair retention price per ton	Existing ex-works retention price per ton
	(1)	(2)	(3)	(4)	(5)
		Rs.	Rs.	Rs.	Rs.
1	Blooms	107·96	55	163	215
2	Billets	117·81	55	173	190
3	Tin bars	114·73	55	170	190
4	Sleeper bars	121·63	75	197	224
5	Structurals, bearing plates and crossing sleeper bars.	143·00	83	226	224
6	Rails (heavy) 50/100 lbs.	132·41	83	215	225
7	Bars and rods (rounds and squares below 3″ and flats upto and including 5″ wide)	137·59	88	226	234
8	Bars other sizes (rounds and squares 3″ and above and flats over 5″ wide)	138·27	83	221	224
9	Rails (light) 30 lbs. and below ..	197·33	85	282	250
10	Fishplates for light rails ..	271·04	90	361	308
11	Fishplates for heavy rails Class 'A' ..	211·43	90	301	283
12	Black sheets (11—14 gauge) ..	151·15	98	249	254
13	Galvanised corrugated sheets (Hard Iron) G/24 (6′/10′)	287·36	108	395	332
14	Plates (3/8″ and up)	177·29	83	260	221
15	Plates acid steel (3/8″ and up) ..	361·76	85	447	..
16	Pressed sleepers	159·78	85	245	..
17	Wheels and tyres	410·43	120	560	..
18	Axles	489·30	120	609	..

* Tested quality.

STATEMENT VI—*contd.*

(2) *The Steel Corporation of Bengal.*

Board's estimates of the works costs, overheads and ex-works fair retention prices.

Serial No.	Name of the product. (untested quality) (1)	Works cost per ton (2)	Overheads per ton (3)	Estimated ex-works fair retention price, per ton. (4)	Existing ex-works retention price per ton. (5)
1	Billets	163·02	30	193	190
2	Structurals	166·58	66	233	224
3	Bars and rods (rounds and squares below 3″ and flats upto 5″ wide)	174·44	68	242	234
*4	Rails (heavy) 50/100 lbs. ..	168·35	65	233	225
5	Rails (light) 30 lbs. and below ..	186·03	72	258	250
6	Black sheets (11-14 gauge) ..	215·32	81	296	254
7	Galvanized corrugated sheets (Hard Iron) G. 24 (6′/10′) ..	334·04	92	426	332

*Tested quality.

STATEMENT VII

Fair retention prices, ex-works, for the Tata Company and the Steel Corporation for comparable items.

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Serial No.	Name of the product (untested quality)	Existing retention price, ex-works.	Estimated retention price	
			Tata Company	Steel Corporation
		Rs. per ton	Rs. per ton	Rs. per ton
1	Billets	190	173	193
2	Structurals	224	226	233
3	Bars and rods (rounds and squares below 3″ and flats upto 5″ wide) ..	234	226	242
*4	Rails (heavy) 50/100 lbs	225	215	233
5	Rails (light 30 lbs. and below) ..	250	282	258
6	Black sheets (11-14 G)	254	249	296
7	Galvanized corrugated sheets (G. 24 -6′/10′)	332	395	426

*Tested quality.

Differential retention prices.

16. It will be seen from statement VII that the estimates of the fair retention prices of the two companies differ considerably, in respect of most of the items. It is, therefore, a moot question whether a differential retention price should be fixed on the basis of the cost of production of each company or whether a uniform retention price for both the companies should be maintained as at present. It has been found that the disparity in costs of production arises from the fact that the units are unequal in size, equipment, financial resources and technical experience. As the object of this inquiry is to determine a fair retention price for both the steel companies, it would obviously be unfair to fix the lower prices of the Tata Company as the retention prices and apply them to the Steel Corporation which has higher costs of production due to many factors beyond its control. On the other hand, if the fair retention prices of the Steel Corporation are accepted as the basis for both the companies, that would go to inflate the profits of the Tata Company which is also not desirable. We have already discussed the reasons for the higher costs of the Steel Corporation in our examination of its works costs. It need hardly be pointed out that the question of fixing differential retention prices arises mainly because of the necessity of control over steel prices, since, in an uncontrolled economy, two or three steel companies would be free to charge whatever prices they can obtain from the consumer and compete with each other or with imported steel. But the fact that steel is a basic article and is in short supply in the country will necessitate not only the import of and control over steel but also the production of indigenous steel at the maximum possible level for the next few years. We have, therefore, to determine retention prices which would cover the cost of production of each company and provide a reasonable return to each. We have examined this question and have also discussed it fully with the representatives of both the companies as well as with the officers of the Ministry of Industry and Supply. We are of the opinion that, while there should, of course, be only *one uniform sale or issue price for steel to the consumer*, different ex-works retention prices must be fixed for the two companies as indicated in column 4 of Statement VI (1) and (2) under paragraph 15. We also recommend that the works costs and overheads of the Steel Corporation should be re-examined and its fair retention prices reviewed at the end of the year.

Future costs.

17. (*a*) The retention prices which we have recommended are based on current costs. Our attention, however, has been drawn to the fact that the price of spelter has already gone up to Rs. 1,430 per ton as against the prices taken by the Board, namely, Rs. 832·45 per ton in the case of the Tata Company and Rs. 898·09 per ton in respect of the Steel Corporation, which were the costs actually incurred by the companies at the time the works costs were examined and the estimates prepared. We have not made any adjustment in the cost to provide for this abnormal rise in the price of spelter. As the retention prices of galvanised sheets which we have recommended are already much higher than the present retention prices, we do not propose to recommend any further increase in the retention prices on account of the higher price of spelter. We, therefore, recommend that Government should make arrangements to supply spelter to both the companies at the prices which the Board has taken in its estimates of cost. Alternatively, the companies should be reimbursed in respect

of additional cost incurred owing to the higher prices of spelter on the *actual purchases* made by them in order to have *six months' stock in hand*. This payment should be on a normal consumption of spelter at the rate of 170/175 lbs. (gross) per ton of galvanised sheet. We stress this point because, as already pointed out, the consumption of spelter by the Tata Company which is 207 lbs. per ton of galvanised sheet, is high and it is essential that the Company should bring it down.

(*b*) It has already been pointed out that the works cost of the Steel Corporation is based on the current cost of hot metal supplied to it by the Indian Iron and Steel Company. We have been informed by both these companies that the high cost of hot metal at the Indian Iron and Steel Company is due largely to the obsolete condition of its coke oven batteries which are being replaced and which will come into operation by the middle of 1949, when an appreciable reduction in the cost of hot metal may be expected. The Steel Corporation's cost of production of steel will also come down correspondingly. We, therefore, recommend that the cost of production of hot metal should be re-examined along with the general review at the end of the year which we have recommended in paragraph 16 (*b*).

Freight disadvantage.

18. During the course of our inquiry, the Steel Corporation raised the question of revision of the system of "freight disadvantage." This question, however, arises when the selling price of steel is determined. As the Board has been asked to recommend fair retention prices ex-works, this matter does not come within the scope of the present inquiry and we do not, therefore, wish to offer any comments on this subject.

Summary of conclusions and recommendations.

19. Our main conclusions and recommendations may be summarised as under:—

(1) The estimates of costs of the Tata Company are based on a total annual production of 6,81,000 tons; and the annual production in the case of the Steel Corporation taken for purposes of costing is 2,23,000 tons. [Paragraphs 7 (*a*) and 7 (*b*)].

(2) The steel industry has made certain representations to the Ministry of Industry and Supply in regard to specifications and ordering of tested steel. The proposals in this behalf should receive favourable consideration. [Paragraph 7 (*d*) (*iii*)].

(3) The whole question of the most effective utilisation of steel-making capacity in the country deserves early re-examination with a view to securing an economic integration of the steel industry. [Paragraph 8 (*b*)].

(4) The works costs of the Steel Corporation are invariably higher than those of the Tata Company, and the principal reasons for this difference are higher cost of materials, higher expenditure on refractories, and higher general works expense. [Paragraph 10].

(5) The Steel Corporation should take immediate steps to effect a substantial reduction in its expenditure on refractories and dolomite. [Paragraph 10 *a*) (*ii*)].

(6) Both the Tata Company and the Steel Corporation should reduce the galvanising and corrugating costs of sheets. In the case of the Tata Company, this is possible by reducing the consumption of spelter and also by reducing the 'stocking and shipping' charges. The Steel Corporation also should reduce its cost by reducing the consumption of sulphuric acid. [Paragraph 10 (*e*) (*ii*)].

(7) The Tata Iron and Steel Company should take early steps to reconstruct its share capital by converting the deferred shares into ordinary ones. [Paragraph 11 (*c*) (*iv*)].

(8) The Steel Corporation of Bengal and the Indian Iron and Steel Company should examine at an early date the possibility of integrating the two plants through amalgamation [Paragraph 11 (*c*) (*v*)].

(9) We have allowed as overheads and profits Rs. 553 lakhs in the case of the Tata Company and Rs. 137 lakhs in the case of the Steel Corporation. The break-up of these sums is given in paragraph 14 (*a*).

(10) Different ex-works retention prices should be allowed to the two companies as indicated in column 4 of statement VI (1) and (2) in Paragraph 15 Paragraph 16].

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(11) The works costs and overheads of the Steel Corporation should be re-examined and fair retention prices reviewed at the end of the year. [Paragraph 16].

(12) Government should make arrangements to supply spelter to both the companies at the price which the Board has taken in its estimates of costs. Alternatively, the companies should be reimbursed in respect of additional cost incurred owing to the higher prices of spelter paid by them on their actual purchases. This payment should be on a normal consumption of spelter at the rate of 170/175 lbs. (gross) per ton of galvanised sheets. [Paragraph 17 (*a*)].

(13) The cost of production of hot metal should also be re-examined in connection with the general review which has been recommended. [Paragraph 17 (*b*)].

Acknowledgments.

20. We desire to acknowledge the assistance which we have received from the officers and staff of the Tata Company and the Steel Corporation at every stage of the cost inquiry. We also want to place on record our appreciation of the valuable work done by our Technical Adviser, Mr. R. N. Kapur, and the Cost Accounts Officer, Mr. O. N. Anand. In inquiring into the costs of production of an important industry like steel, the services of the Technical Adviser and the Cost Accounts Officer are of particular importance and they have discharged their difficult and responsible duties in a manner which requires special mention.

G. L. MEHTA,
President.

H. L. DEY,
Member.

B. V. NARAYANASWAMY,
Member.

R. DORAISWAMY,
Secretary.

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Bombay, 28th February, 1949.

APPENDIX I.

(*Vide* paragraph 4).

GOVERNMENT OF INDIA

MINISTRY OF COMMERCE

RESOLUTION

TARIFFS

New Delhi, the 7th February, 1948

No. 3-T(1) /48.—Consequent on the representations made by the main producers of steel—(The Tata Iron & Steel Co., and the Steel Corporation of Bengal)—that the base retention prices payable to them for the period 1st April 1947 to 31st March 1948 should be increased on the grounds that their works cost had risen considerably on account of increases in the cost of labour and raw materials, and that their expectation that the abolition of the Excess Profits Tax would reduce their liability did not materialise because of the enactment of the Business Profits Tax Act and an increase in the Corporation Tax, the matter was referred to the Commodities Prices Board in May 1947 for advice on the following points—

(*i*) What should be the fair retention price for billets ; and

(*ii*) What should be the adjustment in the existing base retention prices for all other categories to give a fair return to the two Companies ?

The Board was also asked to advise on the relation the retention prices for billets should bear to the bar retention prices.

2. The Board after hearing the representatives of the Government of India and of the Tata Iron & Steel Company, and after taking into consideration all the relevant factors, come to the conclusion that there was no reason to increase steel prices. In view of the uncertainties of the future and the trend of prices generally, they refrained from suggesting a reduction and accordingly recommended the maintenance of prices at their present level.

3. Before Government could come to a decision on the recommendations of the Board, both the Companies have brought to the notice of Government certain new factors which have arisen since the Board made its Report in August last. In particular, the following points have been urged :—

(*i*) that owing to labour unrest the output of steel for the year 1947-48 would be much lower than that taken account of by the Board ;

(*ii*) that the reduced output would increase their works cost ;

(*iii*) that there would be a reduction in gross profits resulting in a substantial decrease in the bonus payable to labour ;

(*iv*) that the result of (*iii*) above would be serious labour strikes ; and

(*v*) that there has been an increase in railway freight both on raw materials and finished products.

4. Government consider that the new facts which have now been brought to their notice have altered the position since the Commodities Prices Board examined the case and therefore deserve to be gone into carefully before Government come to a decision. They also consider that the Steel Corporation of Bengal, which was unable to present its case before the Board in person, should be afforded another opportunity to urge its viewpoint. Government have accordingly decided that the whole matter should be examined afresh by the Tariff Board. Pending such examination, Government have agreed to restore the cut of Rs. 12-8-0 per ton accepted by the Companies in April 1946 on account of the removal of the Excess Profits Tax and to compensate for the increase in railway freight charges, the extent of freight increase to be allowed being dependent on the actual increases.

5. The Tariff Board is accordingly requested to conduct necessary enquiries in this behalf and submit a report to Government as early as possible.

ORDER

S. RANGANATHAN,

Joint Secretary.

APPENDIX II

(*Vide* paragraph 5)

Questionnaire issued to the Tata Iron and Steel Company and the Steel Corporation of Bengal.

I.—PLANT

Please give description of the units of the plant with rated capacity of each unit. Please also state the number of full working days (24 hours) worked in each unit during the last three years.

II.—RAW MATERIALS

Please furnish average analysis for the last three years in respect of:

(*a*) Ore,
(*b*) coal, and
(*c*) any other item, if necessary.

(To the Steel Corporation: This information may be obtained from the Indian Iron and Steel Company).

II.—COST AND STATISTICAL STATEMENTS

(A) *Cost statements** may please be furnished in your usual forms for the years—

1945-46, 1946-47 and 1947-48 and the period January/March, 1948, separately, in the case of the Tata Iron and Steel Company; and

1945, 1946 and 1947 and the period January/March, 1948, separately, in the case of the Steel Corporation of Bengal.

*(To the Steel Corporation: Including Indian Iron and Steel Company's cost sheets for hot metal and services).

(B) *Statistical statements*: The following information may please be furnished in a tabular form for the last three years:—

(1) Orders book for each product;
(2) Output in each department;
(3) Output of each product:—
  (*a*) Saleable,
  (*b*) Defectives, and
  (*c*) Scrap;
(4) Output of by-products in each department;
(5) Despatches of each product;
(6) Works costs per ton of each department;
(7) Works cost per ton of each product;
(8) Average realisation on despatches of each product—
  (*a*) Saleable,
  (*b*) Defectives,
  (*c*) Scrap and
  (*d*) By-products;
(9) Surplus earned over works cost per ton on each product;
(10) Yield of good steel per ton of ingots;
  (*a*) in each department, and
  (*b*) for each product;

(11) *Labour* :

- (*a*) Total yearly expenditure on labour ;
  - (*i*) covenanted,
  - (*ii*) monthly paid,
  - (*iii*) weekly paid, and
  - (*iv*) others.

Please give details of basic wages, dearness allowance, production bonus, other bonus and emoluments ;

- (*b*) Number of men employed (average daily attendance) ;
- (*c*) Labour cost per head per annum—
  - (*i*) covenanted,
  - (*ii*) monthly paid,
  - (*iii*) weekly paid, and
  - (*iv*) others ;
- (*f*) Labour employed and output per head in each of the units ;
- (*e*) Cost of labour per ton of product in each of the units ; and
- (*f*) Labour cost per ton of saleable steel.

IV.—OVERHEADS

Statements under this heading may please be furnished separately under various heads in respect of those not charged through works costs. This should relate to the last three years and be prepared separately for each year.

V.—COST AND FINANCIAL RECONCILIATION

This statement may please be prepared in respect of the year 1947-48 (To the Tata Iron and Steel Company)/year 1947 (To the Steel Corporation of Bengal).

VI. (*a*).—RESERVES

Under this heading, please furnish analysis of various reserves like provision for repairs and renewals, etc.

VI. (*b*).—BALANCE SHEET

This may please be furnished for the years beginning with 1936-37 upto date (To the Tata Iron and Steel Company)/ with 1937 upto date (To Steel Corporation of Bengal),

VI. (*c*)—COPY OF CHAIRMANS' SPEECH

Copies of Chairman's speeches to the shareholders may be furnished for the last three years.

VII.—WORKING—CAPITAL

Please give estimate of your working capital with the break-up for the years 1947-48 and 1948-49 (To Tata Company)/1947 and 1948 (To the Steel Corpn.).

VIII.—BLOCK

(To Tata Company). Please state the gross value and the depreciated value of the block as per your schedule E attached to and forming part of your published accounts.

(To Steel Corporation). Please state the gross value and the depreciated value of the block under various heads.

Note.—The depreciation value should be calculated on the basis of depreciation rate permissible under the Income-Tax Act.

IX.—REPLACEMENT—COST

Please state the present-day replacement cost of your plant.

X.—AGREEMENT WITH MANAGING AGENTS

Please furnish copies indicating any changes recently made.

XI.—LABOUR

Please furnish copies of the latest labour adjudication award and agreement entered into with labour outside the award.

APPENDIX III

(*Vide* paragraph 5).

List of persons who attended the inquiry and were examined by the Board :

14th & 15th September, 1948—

1. Sir Padamji Ginwala
2. Mr. T. N. Hor
3. Mr. C. de B. Griffiths

Representing the Steel Corporation of Bengal, Ltd., Burnpur.

16th & 17th September, 1948—

1. Mr. J. D. Choksi (Director). .. .. ..
2. Sir Jahangir Ghandy (Director), ...
3. Mr. A. Rajagopalan (Deputy Agent), ...
4. Mr. P. H. Kutar (Works Manager). .. ..
5. Mr. S. K. Chaudhury (Deputy Controller of Accounts)

Representing the Tata Iron & Steel Company Ltd., Jamshedpur.

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